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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,131	03/31/2004	Knut S. Grimsrud	42P18203	9630
8791 7590 08/03/2007 BLAKELY SOKOLOFF TAYLOR & ZAFMAN 1279 OAKMEAD PARKWAY SUNNYVALE, CA 94085-4040			EXAMINER HAILU, KIBROM T	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 08/03/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/816,131

Applicant(s)

GRIMSRUD ET AL.

Examiner

Kibrom T. Hailu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-9, 11-12, 14-16, and 18-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Burroughs et al. (US 7,111,158 B1).

Regarding claim 1, Burroughs discloses a method comprising: a host (126(1) or 26(2)) transmitting a first signal to a first device (serial ATA device 24, e.g., disc drive) (Figs. 1, 3 and 4; col. 1, lines 35-36, the host transmits COMRESET signal such as 30(1)); in response to the first signal, the host receiving a second signal (Figs. 1-4; col. 4, line 66-col. 5, line 4; col. 7, lines 13-16, explains communications medium 28 provides signals such as 36(1), 36(2), 84 and/or 104 back to the host); the host detecting a presence of a second device, in response to receipt of the second signal if the host is of a first set of hosts (Figs. 1-4; col. 7, lines 17-21; col. 8, lines 30-34, explains after the initiating host receives a signal from the communications medium 28, the host sends a signal or a command through the communications medium 28. Note also that since the host receives a signal from the communication medium 28 in response to its initial message, obviously the host knows the presence of the medium or switch 28); and the host ignoring the second signal if the host is of a second set of hosts (col. 7, lines 13-21; col. 8, lines 27-34 in combination with col. 1, lines 35-40, explain the confirmation message or signal from the

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medium 28 to one of the hosts is optional. Meaning, since it is optional, it is obvious that the host ignores the signal. Note also that Burroughs discloses a direct transmit and response between the host and the storage device without any signal coming back from a switch in between, see col. 1, lines 35-40.)

Regarding claim 2, Burroughs discloses the second device is a fail over switch (Fig. 2; col. 3, line 66-col. 4, line 2; col. 5, line 64-col. 6, line 1; col. 7, lines 6-11, 14-16...).

Regarding claim 3, Burroughs discloses after receiving the second signal, the host receiving a third signal from the first device (Figs. 1-4; col. 1, lines 37-38; col. 7, lines 22-26; col. 8, lines 34-37, “cominit signal” or signals 34, 76 or 86, and 96 or 106); the host transmitting the second signal to the first device (col. 1, lines 38-39, the host transmits the “comwake signal”); and the host receiving a second signal from the first device (col. 1, lines 39-40, the storage device 24 sends the “comwake signal” back to the host that initiates the communication).

Regarding claim 4, Burroughs discloses performed during a handshake initialization sequence between the host and the first device (col. 1, lines 29-36 in combination with col. 5, line 11).

Regarding claim 5, Burroughs discloses the second signal is a Serial ATA out of band (OOB) signal (col. 1, lines 31-35).

Regarding claim 6, Burroughs discloses the fail-over switch is a Serial ATA fail over switch (col. 1, lines 30-31).

Regarding claims 7, 11, 14 and 18, Burroughs discloses a machine-accessible medium that provides instructions that (Figs. 1-4, “communication medium”), if executed by a machine, will cause said machine to perform operations comprising: a host (126(1) or 26(2)) transmitting a

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first signal to a first device (serial ATA device 24, e.g., disc drive) (Figs. 1, 3 and 4; col. 1, lines 35-36, the host transmits COMRESET signal such as 30(1)); the host receiving a second signal from a second device (Figs. 1-4; col. 4, line 66-col. 5, line 4; col. 7, lines 13-16, explains communications medium 28 provides signals such as 36(1), 36(2), 84 and/or 104 back to the host); the host identifying a presence of the second device, in response to receipt of the second signal (Figs. 1-4; col. 7, lines 17-21; col. 8, lines 30-34, explains after the initiating host receives a signal from the communications medium 28, the host sends a signal or a command through the communications medium 28. Note also that since the host receives a signal from the communication medium 28 in response to its initial message, obviously the host knows the presence of the medium or switch 28); the host receiving a third signal from the first device (Figs. 1-4; col. 1, lines 37-38; col. 7, lines 22-26; col. 8, lines 34-37, "cominit signal" or signals 34, 76 or 86, and 96 or 106); the host transmitting the second signal to the first device (col. 1, lines 38-39, the host transmits the "comwake signal"); and the host receiving the second signal from the first device (col. 1, lines 39-40, the storage device 24 sends the "comwake signal" back to the host that initiates the communication).

Regarding claims 8, 12, 16 and 20, which inherit the limitations of claims 7, 11, 14 and 18, respectively, include the features corresponding to subject matter mentioned above in the rejection of claim 4, and is applicable hereto.

Regarding claim 9, which inherits the limitation of claim 7, includes the features corresponding to subject matter mentioned above in the rejection of claim 5, and is applicable hereto.

Regarding claims 15 and 19, Burroughs discloses the fail-over switch is a Serial ATA fail over switch (col. 1, lines 30-33).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 10, 13, 17 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burroughs in view of Grieff et al. (US 6,948,036 B2).

Regarding claims 10, 13, 17 and 21, Burroughs discloses the machine-accessible medium (28). However, Burroughs doesn't explicitly disclose the medium is one of an internal logic of a circuit and an internal state machine of a circuit.

Grieff teaches the medium (Fig. 1, "adapter") is one of an internal logic of a circuit and an internal state machine of a circuit (Fig. 1; col. 3, lines 1-10; col. 4, lines 49-66).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the logic and state machine of Grieff into the communication

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medium 28 of Burroughs in order to enable multi-initiator support for serial ATA drives (Grieff, col. 2, lines 38-42).

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kibrom T. Hailu whose telephone number is (571)270-1209. The examiner can normally be reached on Monday-Thursday 8:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Q. Ngo can be reached on (571)272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kibrom Hailu

KTH

07/26/07

Ricky Q. Ngo

RICKY Q. NGO
SUPERVISORY PATENT EXAMINER